

REMARKS

In the final Office Action, the Examiner rejected claims 19-21 and 31 under 35 U.S.C. § 101 as directed to non-statutory subject matter; rejected claims 1, 3, 7, 14, 17-24, and 26-34 under 35 U.S.C. § 102(e) as anticipated by Shultz et al. (U.S. Patent Application Publication No. 2003/0061211); and rejected claims 4-6 and 8-11 under 35 U.S.C. § 103(a) as unpatentable over Shultz et al. in view of Berkan et al. (U.S. Patent Application Publication No. 2003/0074353). The Examiner objected to claims 12 and 13 as dependent upon a rejected base claim, but indicated that claims 12 and 13 would be allowable if rewritten in independent form to include all of the features of the base claim and any intervening claim.

By this Amendment, Applicants propose amending claims 1, 7, 14, 19-24, 26, 28, 31, 32, and 34 to improve form. Applicants appreciate the Examiner's identification of allowable subject matter, but respectfully traverse the Examiner's rejections under 35 U.S.C. §§ 101, 102, and 103 with regard to the claims presented herein. Claims 1, 3-14, 17-24, and 26-34 remain pending.

REJECTION UNDER 35 U.S.C. § 101

In paragraph 5 of the final Office Action, the Examiner rejected claims 19-21 and 31 under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. In particular, the Examiner alleged that the claims do not recite any hardware elements and can be implemented as software per se (final Office Action, paragraph 5).

Without acquiescing in the Examiner's rejection, but solely to expedite prosecution, Applicants propose amending claims 19, 20, and 31 to recite "one or more devices." Thus, claims 19, 20, and 31 now clearly recite hardware. Thus, contrary to the Examiner's allegation,

claims 19, 20, 21 (which depends from claim 20), and 31 are not directed to software per se. For at least these reasons, Applicants submit that claims 19-21 and 31 are directed to statutory subject matter under 35 U.S.C. § 101.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 19-21 and 31 under 35 U.S.C. § 101.

REJECTION UNDER 35 U.S.C. § 102 BASED ON SHULTZ ET AL.

In paragraph 8 of the final Office Action, the Examiner rejected claims 1, 3, 7, 14, 17-24, and 26-34 under 35 U.S.C. § 102(e) as allegedly anticipated by Shultz et al. Applicants respectfully traverse the rejection.

A proper rejection under 35 U.S.C. § 102 requires that a single reference teach every aspect of the claimed invention. Any feature not directly taught must be inherently present. In other words, the identical invention must be shown in as complete detail as contained in the claim. See M.P.E.P. § 2131. Shultz et al. does not disclose or suggest the combination of features recited in claims 1, 3, 7, 14, 17-24, and 26-34.

Proposed independent claim 1, for example, is directed to a method that is performed by a server device and that comprises receiving, by a processor of the server device, a search query; determining, by the processor, a geographic location associated with the query; determining, by the processor, a topic associated with the query; identifying, by the processor, a set of documents based, at least in part, on the query; determining, by the processor, a location sensitivity score that corresponds to a geographic range associated with the topic, where the geographic range reflects a geographic distance that differs for different topics; determining, by the processor, topical scores for the set of documents based, at least in part, on the query; determining, by the

processor, a distance score for each document in the set of documents based, at least in part, on the location sensitivity score and a measure of distance between a geographic location of a business associated with the document and the geographic location associated with the query; generating, by the processor, search results associated with the set of documents; and ordering, by the processor, the search results, associated with the set of documents, as a function of both the topical scores for the set of documents and the distance scores for the set of documents.

Shultz et al. does not disclose or suggest the combination of features recited in claim 1. For example, Shultz et al. does not disclose or suggest determining a location sensitivity score that corresponds to a geographic range associated with a topic that is associated with a query, where the geographic range reflects a geographic distance that differs for different topics, as recited in claim 1. In fact, Shultz et al. does not even disclose or suggest a geographic range associated with a topic, as recited in claim 1.

The Examiner alleged that Shultz et al. discloses determining a topic associated with a query and determining a location sensitivity score that corresponds to a geographic range associated with the topic, and cited paragraphs 0052 and 0053 of Shultz et al. for support (final Office Action, page 3). Applicants submit that Shultz et al. provides no support for the Examiner's allegations.

Applicants believe that the Examiner continues to maintain this rejection based on Shultz et al. because the Examiner does not understand what Applicants intend by a location sensitivity score. Applicants' specification describes determining the relationship between a topic and its location sensitivity (i.e., a measure of the amount or extent that geographically-based search results are relevant to the topic, which can be expressed as a relevant geographic range for the

topic) (paragraphs 0031 and 0032). Applicants' specification provides examples of the location sensitivity of the topics of "restaurant," "car/automobile," "plumbers," and "travel destinations" (paragraphs 0032 and 0046). As described in Applicants' specification, the topic of "restaurant" may be associated with a geographic range of 5 miles, and the topic of "automobiles/cars" may be associated with a geographic range of 50 miles (paragraph 0032). Topics associated with large geographic ranges (e.g., the topic of car/automobile) are less location sensitive than topics associated with small geographic ranges (e.g., the topic of restaurant). Applicants' specification describes that the location sensitivity can be expressed as a location sensitivity score that is used to adjust the rate at which a distance score function decreases as a function of distance (paragraph 0047). Thus, the geographic range may be expressed as a value that can be used to calculate the distance score using a function, such as the function shown in paragraph 0047 of Applicants' specification. Shultz et al. does not disclose anything that reasonably corresponds to a location sensitivity score, as recited in claim 1.

At paragraph 0052, Shultz et al. discloses:

The resulting geocodes and/or other geographic reference information, along with any text search information from the user query (step 212), is then used for querying one or more general information database(s) (e.g., database server 138 and business information database 133) to find records matching the geographic reference and/or text search information (step 220). In one preferred embodiment for a spatial search, corresponding geocodes are parsed into an SQL database query along with other information fields, for example, subject matter of the search (steps 213 and 214). The SQL query is used to search a database (e.g., business information DB 133) for records that have a matching geocode and/or other information fields. Matching records are then provided and/or displayed to the user (e.g., via HTML interface 21) (steps 250 and 260).

In this section, Shultz et al. discloses parsing geocodes and other information fields, such as the subject matter of the search, to create an SQL database query. Even assuming, for the sake of argument, that parsing the other information fields, such as the subject matter of the search, can

reasonably correspond to determining a topic associated with a query (a point that Applicants do not concede), Shultz et al. does not disclose or remotely suggest determining a geographic range associated with the subject matter of the search, as would be required by claim 1 under this interpretation of Shultz et al. Thus, Shultz et al. does not disclose or suggest determining a location sensitivity score that corresponds to a geographic range associated with a topic associated with a query, where the geographic range reflects a geographic distance that differs for different topics, as recited in claim 1.

At paragraph 0053, Shultz et al. discloses:

According to certain aspects of the present invention, database query (step 220) may identify matching records from database 133 including location information (step 222), advertising information (step 224) and/or business information (step 226) related to user query 202.

In this section, Shultz et al. discloses identifying matching records in a database including location information, advertising information, and/or business information relating to the user query. There is absolutely nothing in this section that can reasonably correspond to a geographic range associated with a topic. Thus, Shultz et al. does not disclose or suggest determining a location sensitivity score that corresponds to a geographic range associated with a topic that is associated with a query, as recited in claim 1. Rather, this section of Shultz et al. merely discloses types of information in a database that might match a user query.

The Examiner alleged that the "business information" in paragraph 0053 of Shultz et al. is a topic (final Office Action, page 3). Even assuming, for the sake of argument, that the "business information," disclosed by Shultz et al., can reasonably correspond to a topic associated with a query (a point that Applicants do not concede), Shultz et al. does not disclose or suggest determining a geographic range associated with the business information, as would be

required by claim 1 under this interpretation of Shultz et al. Thus, Shultz et al. does not disclose or suggest determining a location sensitivity score that corresponds to a geographic range associated with a topic that is associated with a query, where the geographic range reflects a geographic distance that differs for different topics, as recited in claim 1.

The Examiner alleged that the term "location sensitivity score" is "very vague, thus it is very unclear how this score is obtained or what exactly it encompasses" (final Office Action, page 10). Applicants respectfully disagree with the Examiner's allegation. Applicants' specification is clear as to what the location sensitivity score is, as explained above.

Because Shultz et al. does not disclose or suggest determining a location sensitivity score that corresponds to a geographic range associated with a topic that is associated with a query, where the geographic range reflects a geographic distance that differs for different topics, Shultz et al. cannot disclose or suggest determining a distance score for each document in the set of documents based, at least in part, on the location sensitivity score and a measure of distance between a geographic location of a business associated with the document and the geographic location associated with the query, as further recited in claim 1.

The Examiner alleged that Shultz et al. discloses this feature and cited steps 232-236 of Shultz et al. for support (final Office Action, pages 3-4). Applicants submit that Shultz et al. provides absolutely no support for the Examiner's allegation.

At paragraph 0060, Shultz et al. discloses:

Any of these types of matching information may subsequently be sorted according to user preference and/or a predefined search result sorting routine. Such sorting may pertain to specific sorting criteria, for example, by order of importance, relevance or hierarchy of the information retrieved from database 133. Example sorting criterion might include, a distance from the user identified location (e.g., step 232), corresponding advertising information (e.g., step 234)

and/or business information (e.g., step 236). Business information may be sorted according to various criteria, for example, alphabetical criteria, such as by the name of the business, size criteria, such as the size of the business, price criteria, time criteria, event criteria, or any other sorting criteria that might be helpful to a user.

In this section, Shultz et al. discloses sorting matching information according to importance, relevance, hierarchy of information, distance from the user identified location, corresponding advertising information, or corresponding business information. There is absolutely nothing in this section that can reasonably correspond to a location sensitivity score or determining a distance score based, at least in part, on a location sensitivity score and a measure of distance. Rather, Shultz et al. merely discloses criteria for **sorting** information. None of this sorting criteria reasonably corresponds to a location sensitivity score or a distance score, as recited in claim 1. Thus, Shultz et al. does not disclose or suggest determining a distance score for each document in the set of documents based, at least in part, on the location sensitivity score and a distance between a geographic location of a business associated with the document and the geographic location associated with the query, as recited in claim 1.

Even assuming, for the sake of argument, that business information can reasonably correspond to a topic and that the distance from the user identified location can reasonably correspond to a measure of distance between a geographic location of a business associated with the document and the geographic location associated with the query (points that Applicants do not concede), as alleged by the Examiner, Shultz et al. would merely disclose sorting information based on the topic and/or the measure of distance. Shultz et al. does not disclose or remotely suggest determining a distance score based on a score that corresponds to a geographic range associated with the business information and the distance from the user identified location, as would be required by claim 1 based on the Examiner's interpretation of Shultz et al. Thus,

Shultz et al. does not disclose or suggest determining a distance score for each document in the set of documents based, at least in part, on the location sensitivity score (i.e., a score that corresponds to a geographic range associated with a topic associated with a received query) and a measure of distance between a geographic location of a business associated with the document and the geographic location associated with the query, as recited in claim 1.

The Examiner also alleged that "Applicant is also silent with regards to the respective scores, are they actually numerical scores stored separately and then combined together to arrive with the final score that will set an optimal rank?" (final Office Action, pages 10-11). Applicants cannot understand the Examiner's confusion. Applicants' specification makes it clear that the location sensitivity score is expressed as a value and the measure of distance is expressed as a separate value (paragraph 0047). Whether the scores are stored separately is not relevant to the features recited in claim 1. Claim 1 recites that the distance score is determined based, at least in part, on both the location sensitivity score (value) and the measure of distance (value). Thus, Applicants submit that it is clear what is intended by the terms "location sensitivity score," "measure of distance," and "distance score," as recited in claim 1.

The Examiner alleged that Shultz et al. discloses determining the score for a document based on business information (i.e., topic) as well as distance to the provider, and that the distance from the user's location to a designated business address is a geographical range (final Office Action, page 11). Applicants submit that the Examiner's allegation lacks merit. Claim 1 does not simply recite a geographic range. Rather, claim 1 specifically recites a location sensitivity score that corresponds to a geographic range associated with a topic associated with a received query, where the geographic range reflects a geographic distance that differs for

different topics. The Examiner has not provided a reasonable, articulated explanation of how the disclosure of Shultz et al. can be interpreted as disclosing determining a location sensitivity score that corresponds to a geographic range associated with a topic associated with a received search query, where the geographic range reflects a geographic distance that differs for different topics, as recited in claim 1.

The Examiner alleged that business information corresponds to a topic and that the distance from a user's location to a designated business address is a geographic range (final Office Action, page 11). Regardless of whether business information can reasonably be interpreted as a topic and regardless of whether the distance from the user's location to a designated business address can reasonably be interpreted as a geographic range, Shultz et al. does not disclose determining a distance score based on (1) the distance from the user's location to a designated business address (which the Examiner alleged corresponds to a location sensitivity score) and (2) a distance between a geographic location of a business associated with the document and a geographic location associated with the query. The Examiner has not provided a reasonable, articulated explanation of how the disclosure of Shultz et al. can be interpreted as disclosing determining a distance score for each document in the set of documents based, at least in part, on (1) the location sensitivity score and (2) a measure of distance between a geographic location of a business associated with the document and the geographic location associated with the query, as recited in claim 1. Rather, the Examiner merely identified criteria that Shultz et al. uses to sort information extracted from a database in paragraph 0060 (final Office Action, page 11).

The Examiner appears to give no weight to the measure of distance between a geographic

location of a business associated with the document and the geographic location associated with the query that is recited in claim 1. In particular, the Examiner states "note that location sensitivity score already reflects the distance between a user and a business/document location" (final Office Action, page 12). Applicants strenuously object to the Examiner's unreasonable interpretation of Applicants' claim language. It is unreasonable to interpret claim language in a manner where certain claim features are ignored. The Examiner has taken an interpretation of claim 1, for example, where the Examiner appears to point to the exact same disclosure of Shultz et al. (i.e., the distance from a user's location) as corresponding to two separate features of claim 1--i.e., (1) the location sensitivity score and (2) the measure of distance. Applicants submit that this interpretation is unreasonable and must be withdrawn.

For at least these reasons, Applicants submit that claim 1 is not anticipated by Shultz et al. Claims 3, 7, 14, 17, and 18 depend from claim 1 and are, therefore, not anticipated by Shultz et al. for at least the reasons given with regard to claim 1.

Independent claims 19, 20, and 22 recite features similar to (yet possibly different in scope from) features identified above with regard to claim 1. Claims 19, 20, and 22 are, therefore, not anticipated by Shultz et al. for at least reasons similar to reasons given with regard to claim 1. Claim 21 depends from claim 20, and claim 32 depends from claim 19. Claims 21 and 32 are, therefore, not anticipated by Shultz et al. for at least the reasons given with regard to claims 20 and 19, respectively. Claims 23, 24, and 26 depend from claim 22 and are, therefore, not anticipated by Shultz et al. for at least the reasons given with regard to claim 22.

Independent claim 27 is directed to a system that comprises at least one server device configured to receive a search query, determine a topic associated with the search query,

determine location sensitivity data that reflects a measure of relevance of geographically-based search results to the topic, identify a set of documents based, at least in part, on the search query, determine a geographic location associated with each document in the set of documents, and score a document in the set of documents based, at least in part, on the geographic location associated with the document and the location sensitivity data.

Shultz et al. does not disclose or suggest the combination of features recited in claim 27. For example, Shultz et al. does not disclose or suggest at least one server device that is configured to, among other things, determine location sensitivity data that reflects a measure of relevance of geographically-based search results to a topic associated with a query. In fact, Shultz et al. does not disclose or remotely suggest anything corresponding to a measure of relevance of geographically-based search results to a topic. Thus, Shultz et al. cannot disclose or suggest at least one server device that is configured to, among other things, determine location sensitivity data that reflects a measure of relevance of geographically-based search results to a topic associated with a query, as recited in claim 27.

Shultz et al. discloses performing a search based on a user query that includes location data, a general information query, and/or geographic criteria, and sorting the results of the search according to user preference and/or a predefined search result sorting routine (paragraphs 0046 and 0060). Nowhere does Shultz et al. disclose or suggest a measure of relevance of geographically-based search results to a topic. Thus, Shultz et al. cannot disclose or suggest at least one server device that is configured to, among other things, determine location sensitivity data that reflects a measure of relevance of geographically-based search results to a topic associated with a query, as recited in claim 27.

The Examiner did not address this feature of claim 27. Thus, the Examiner did not establish a proper case of anticipation with regard to claim 27.

For at least these reasons, Applicants submit that claim 27 is not anticipated by Shultz et al. Claim 33 depends from claim 27 and is, therefore, not anticipated by Shultz et al. for at least the reasons given with regard to claim 27.

Independent claim 28 is directed to a method that comprises analyzing a target document to identify a topic for the target document and a geographic location associated with the target document; identifying targeting information for a plurality of advertisements; comparing the targeting information to the topic to identify a set of potential advertisements; determining a distance score for at least one advertisement in the set of potential advertisements using a geographic location of an advertiser associated with the one advertisement and the geographic location associated with the target document; ordering the set of potential advertisements based, at least in part, on the distance score of the at least one advertisement; and presenting at least some of the ordered set of potential advertisements within the target document.

Shultz et al. does not disclose or suggest the combination of features recited in claim 28. For example, Shultz et al. does not disclose or suggest determining a distance score for at least one advertisement in a set of potential advertisements using a geographic location of an advertiser associated with the one advertisement and a geographic location associated with a target document.

The Examiner alleged that Shultz et al. discloses this feature and cited paragraph 0060 of Shultz et al. for support (Office Action, page 5). Applicants submit that Shultz et al. provides no support for the Examiner's allegation.

At paragraph 0060 (reproduced above), Shultz et al. discloses sorting matching information according to importance, relevance, hierarchy of information, distance from the user identified location, corresponding advertising information, or corresponding business information. In this section, Shultz et al. discloses "a distance from the user identified location." The "user identified location" refers to the user's geographic location, destination, or area of interest (paragraph 0047). Thus, Shultz et al. discloses a distance from matching information to the user's geographic location, destination, or area of interest. Shultz et al. does not disclose, however, a distance determined using a geographic location of an advertiser and a geographic location associated with a target document. Thus, Shultz et al. does not disclose or suggest determining a distance score for at least one advertisement in a set of potential advertisements using a geographic location of an advertiser associated with the one advertisement and a geographic location associated with a target document, as recited in claim 28.

The Examiner alleged that it is unclear what is intended by "a geographic location associated with a target document" and alleged that this feature will be interpreted as the location of a user "since the target document is displayed on user's computer" (final Office Action, pages 12-13). Applicants submit that the Examiner's allegation is unreasonable. Applicants' specification clearly provides support for a geographic location associated with a document at, for example, paragraphs 0007 (e.g., Each business listing may include listing information, such as the business name, address, telephone number, business category, etc.); 0029 (e.g., The location database 120 stores geographic or location data associated with documents and/or users.); 0034 (e.g., In one implementation, the location database 120 may store address/map data associated with users, queries, and/or documents stored by the server device 104.); 0043 (e.g.,

For example, in one implementation, one or more locations associated with each of the identified documents is determined . . .); 0052 (e.g., a technique may be used to analyze a target document to identify . . . a location associated with the target document); etc. Thus, Applicants submit that the Examiner's allegation, that the geographic location associated with a target document corresponds to the geographic location of a user, lacks merit.

For at least these reasons, Applicants submit that claim 28 is not anticipated by Shultz et al. Claims 29 and 30 depend from claim 28 and are, therefore, not anticipated by Shultz et al. for at least the reasons given with regard to claim 28.

Independent claim 31 recites features similar to (yet possibly different in scope from) features identified above with regard to claim 28. Claim 31 is, therefore, not anticipated by Shultz et al. for at least reasons similar to reasons given with regard to claim 28. Claim 34 depends from claim 31 and is, therefore, not anticipated by Shultz et al. for at least the reasons given with regard to claim 34.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 3, 7, 14, 17-24, and 26-34 based on Shultz et al.

REJECTION UNDER 35 U.S.C. § 103 BASED ON SHULTZ ET AL. AND BERKAN ET AL.

In paragraph 10 of the final Office Action, the Examiner rejected claims 4-6 and 8-11 under 35 U.S.C. § 103(a) as allegedly unpatentable over Shultz et al. in view of Berkan et al. Applicants respectfully traverse the rejection.

Claims 4-6 and 8-11 depend from claim 1. Without acquiescing in the Examiner's rejection of claims 4-6 and 8-11, Applicants respectfully submit that the disclosure of Berkan et al. does not cure the deficiencies in the disclosure of Shultz et al. identified above with regard to

claim 1. Therefore, claims 4-6 and 8-11 are patentable over Shultz et al. and Berkan et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 4-6 and 8-11 based on Shultz et al. and Berkan et al.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of the pending claims.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1, 3-14, 17-24, and 26-34 in condition for allowance. Applicants submit that this Amendment should allow for immediate action by the Examiner. Further, Applicants submit that the entry of this Amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

As Applicants' remarks with respect to the Examiner's rejections overcome the rejections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, reasons for modifying a reference and/or combining references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or that such requirements have been met, and Applicants reserve the right to dispute these assertions/requirements in the future.

If the Examiner believes that the application is not now in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned to discuss any

outstanding issues.

To the extent necessary, a petition for an extension of time under 35 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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